

MEMORANDUM OF UNDERSTANDING

10-01-2018

This Memorandum of Understanding (MOU) is voluntarily entered this ____ day of October, 2018, by and among the Wisconsin Department of Natural Resources (WDNR), Juneau County, Wood County and the Armenia Growers Coalition, LLC.

A. Background

WHEREAS Juneau and Wood County (the "Counties"), in the interest of ensuring their residents have access to safe drinking water, have tested more than 100 private residential wells in the Counties and found over 40% of the wells exceed the state drinking water standard of 10 mg/L for nitrate;

WHEREAS the United States Environmental Protection Agency (EPA) conducted groundwater testing from April 30 through May 3, 2018, at 41 temporary boring locations and 5 private residential wells west of Petenwell Lake in northeast Juneau County and found elevated levels of nitrate in the groundwater;

WHEREAS a 1995 groundwater resource and agricultural practice evaluation that was published by the Central Wisconsin Groundwater Center and titled "Port Edwards Groundwater Priority Watershed" documented nitrate contaminant plumes exceeding the state enforcement standard in groundwater from irrigated fields in the agricultural corridor in southern Wood County west of the Wisconsin River;

WHEREAS, the Department of Health Services (DHS) has issued a fact sheet on nitrate in drinking water, which states that everyone should avoid long-term use of drinking water with nitrate levels above 10 mg/L and women who are or may become pregnant and babies should not consume this water, [HYPERLINK "<https://www.dhs.wisconsin.gov/publications/p02128.pdf>"];

WHEREAS the Armenia Growers Coalition, LLC (AGC) represents three farms that are currently the predominant farmers in the agricultural corridor that is west of the Wisconsin River, south of Port Edwards, north of Necedah, and east of several state natural and wildlife areas;

WHEREAS AGC, in receipt of the aforementioned testing results, has voluntarily coordinated and collaborated with the Counties on a response effort to offer residents bottled water and an in-home point-of-use water treatment system if wells in the agricultural corridor study area defined in this MOU test above 10 mg/L for nitrate (the Clean Drinking Water Plan); and

WHEREAS the Counties and WDNR have agreed to collaborate with AGC on further investigation of nitrate contamination in the agricultural corridor and implementation of the Clean Drinking Water Plan;

Now, therefore, the process the Parties agree to follow to implement the Clean Drinking Water Plan and the Groundwater Hydrogeology, Agricultural Practices and Monitoring Plans is as follows:

B. Definitions

Agricultural corridor study area is the area with the boundaries depicted on the attached map, marked as Exhibit A. The Parties may agree to adjust the boundaries of the area to reflect further investigation and sampling results.

Clean Drinking Water Plan is the plan to provide bottled drinking water and an in-home point-of-use water treatment system, as further detailed in this MOU.

Counties means Juneau and Wood Counties.

County-verified water test means a well water sample collected by an employee of the Counties that is submitted to a state certified and WDNR approved lab for analysis. If a well water sample is collected by a homeowner, it must be verified by a sample taken by an employee of the Counties for a test result to be a County-verified water test under this MOU.

Groundwater Hydrogeology, Agricultural Practices and Monitoring Plans are the plans to (1) further investigate the hydrogeology of the agricultural corridor study area to determine the depth at which water safe at the source can be obtained for owners of nitrate-impaired wells, (2) evaluate the impact of current and potential changes to agricultural practices, and (3) monitor the fate of concentrations of nitrate in groundwater.

Nitrate-impaired means well water primarily used for drinking water having nitrate concentrations at or above 10.0 mg/L.

Parties means AGC, the Counties and WDNR.

Simple access agreement means the agreement attached as Exhibit B.

Water Treatment System means a reverse osmosis or a similar treatment system certified by the Wisconsin Department of Safety and Professional Services (DPS) for the reduction of nitrate at the highest level found in a water test from a nitrate-impaired well to below 10 mg/L.

C. Clean Drinking Water Plan

1. The Parties agree that all private residential wells in the agricultural corridor study area should be tested. There are 1209 known addresses located in the agricultural corridor study area (823 in Juneau County and 386 in Wood County). Not all addresses have private wells. For the purpose of this MOU, it is assumed there are approximately 700 private residential wells in the agricultural corridor study area, 576 of which have not yet had a County-verified water test completed.
2. The Counties will conduct outreach to private residential well owners in the agricultural corridor study area to request those homeowners whose wells have not been tested to test their well for nitrate and to send the sample to a WDNR certified laboratory for analysis. This outreach will include, at a minimum:
 - a. A letter and sampling kit sent to each private well owner and include the following:
 - (1) Notification of the groundwater nitrate contamination in the

- agricultural corridor;
 - (2) request that the homeowner immediately test their well for nitrate;
 - (3) sampling kit with instructions;
 - (4) public health information relating to nitrate in drinking water; and
 - (5) a request for confirmation of receipt.
 - b. A follow up phone call for homeowners not responding to the letter within two weeks.
 - c. A personal visit to the residence for those homeowners that are unable to be reached via letter or phone call to ensure all homeowners whose wells have not been tested have been alerted of the nitrate contamination issue and are allowed the opportunity to test their well as soon as practicable.

If a homeowner in the agricultural corridor study area takes a sample and receives a test result of 10 mg/L or above, the Counties will advise the homeowner not to drink the water, will inform the homeowner of the Clean Drinking Water Plan and will take another sample to verify the result for the homeowner to be eligible for AGC's offer of bottled water and a Water Treatment System. AGC will pay for the certified lab testing costs under this paragraph.

3. For private residential wells located in the agricultural corridor study area that are nitrate-impaired, all the following apply:
 - a. The Counties will provide AGC a confidential list of addresses for each of the nitrate-impaired wells they have identified.
 - b. AGC will send a letter to each identified well owner, making an offer to provide bottled water and a Water Treatment System, as outlined in this MOU.
 - c. If AGC does not hear from a homeowner letter recipient within one week, it will send a follow up correspondence.
 - d. If AGC does not hear from the homeowner within a week of sending the second communication, it will notify the Counties. The Counties will then assume primary responsibility for contacting the homeowner to inform them of the Clean Drinking Water Plan.
 - e. A homeowner will have up to twelve (12) months following a County-verified water sample that indicates the home has a nitrate-impaired well to accept AGC's offer to provide bottled water and the installation and maintenance of a Water Treatment System.
4. Once AGC receives notice of a nitrate-impaired well within the agricultural corridor study area, all the following will apply:
 - a. AGC will offer to immediately provide the homeowner a two-week supply of drinking water and will offer to arrange, at no cost to the homeowner, to install a Water Treatment System.
 - b. If the homeowner accepts AGC's offer of a Water Treatment System within two weeks of the offer, AGC will continue to supply the homeowner with bottled drinking water until the Water Treatment System is installed and verified to produce drinking water under the 10 mg/L standard for nitrate. AGC will be invoiced directly for the Water Treatment System and bottled drinking water deliveries.
 - c. If the homeowner does not accept AGC's offer to install a Water Treatment System within two weeks after the offer, AGC will notify the Counties of the homeowner's

- decision to decline the offer. In this case, AGC would discontinue providing any further bottled water to the homeowner.
- d. For homeowners with nitrate-impaired wells who accept the offer of a Water Treatment System, AGC will arrange for a licensed installer to be dispatched to the home as soon as practicable to conduct an inspection of the plumbing system to determine reasonable compatibility (e.g. piping, water pressure, under sink cabinet space) with the Water Treatment System. The licensed installer will enter the home only after the homeowner has signed a simple access agreement. Upon completion of the inspection, the licensed installer will send a report of the inspection to the homeowner, the WDNR, the Counties, and AGC. The licensed installer's report will indicate if the plumbing is reasonably compatible with the Water Treatment System and if not, the report will identify any necessary plumbing repairs or adjustments necessary to install the Water Treatment System.
 - e. If the licensed installer hired by AGC determines that the plumbing is not reasonably compatible with the Water Treatment System selected, the licensed installer will recommend other options for alternative water, such as another point-of-use or point-of-entry treatment system approved by DSPS. Any necessary plumbing repairs or adjustments are the responsibility of the homeowner. AGC will continue to provide bottled water to the homeowner for a period of up to three (3) months after an inspection to allow the homeowner time to make any needed repairs or for AGC and the homeowner to select another treatment option from devices approved by DSPS. It will be expected the homeowner contact AGC when the repairs are completed or when they reach agreement on an alternative treatment option.
 - f. If the licensed installer hired by AGC determines that a homeowner's plumbing is reasonably compatible with the requirements for a Water Treatment System, the Water Treatment System will be installed by a professional installer as soon as practicable. The Water Treatment System will be installed to provide drinking water to a spigot located at the kitchen sink or at the refrigerator, depending on water pressure requirements, appliance compatibility, and the treatment manufacturer specifications and stipulations of the DSPS approval. No later than 48 hours after the installation of the Water Treatment System, the professional installer and the homeowner will together take a sample of the drinking water and provide their initials on the sample. The sample will then be tested for nitrate concentration by a WDNR certified laboratory. The results of the test will be shared with the homeowner, professional installer, the Counties, and WDNR. If the test indicates a nitrate concentration below 10 mg/L, AGC will no longer continue to provide bottled drinking water to the homeowner. If the test indicates a nitrate concentration at or above 10 mg/L, AGC will continue to provide bottled drinking water and will work with the homeowner to ensure a Water Treatment System is installed and the resulting treated water meets the state nitrate drinking water standard. AGC will provide homeowners with a paid 3-year maintenance agreement from the date of installation of the Water Treatment System, including testing and replacement of filters in accordance with the manufacturer's recommendations and DSPS approval.

D. Groundwater Hydrogeology, Agricultural Practices, and Monitoring Plans

1. The Parties will support a two-year groundwater study to be conducted in the agricultural corridor study area. The goals of the study will include: a) Identifying the 3-dimensional

distribution of water containing less than 10 mg/L nitrate accessible in sufficient quantity to supply private well owners in the agricultural corridor study area; b) Identifying the 3-dimensional distribution of water in the agricultural corridor study area that could be expected to supply water for at least 25 years under present land use; and c) Confirmation or recommendations to revise/refine the existing WDNR casing recommendations for the agricultural corridor study area. The Parties agree to work together to secure funds to split the cost for the study estimated at \$225,000, not to exceed a contribution of \$75,000 for any of the Parties unless one or more Parties decides to provide additional funding.

2. The Parties will support a producer-led program to evaluate agricultural impacts on groundwater in the agricultural corridor study area. AGC and any other interested growers or associations will work with the WDNR and Counties to document the impacts, if any, of current agricultural practices in the agricultural corridor study area on concentrations of nitrate in groundwater. This may involve groundwater monitoring networks installed upgradient and downgradient of row-crop fields to determine the impact of changes that may reduce the nitrogen loading to groundwater. Practice changes may include but are not limited to changes in crop rotations, reductions of total nitrogen applied (accounting for all sources of nitrate), changes in the timing of applications, and the use of cover crops. Data from the program will be shared with the Counties and WDNR. Educational programs will be developed for residents in the agricultural corridor study area to describe the changes that are being made and the goal of the program. The groundwater program results will be made available to the public.
3. The Parties agree to develop a long-term groundwater monitoring plan of the agricultural corridor study area to document the fate of the existing nitrate contamination. The study design will be led by WDNR in consultation with the Counties and other state and federal agencies. AGC agrees to set aside \$50,000 for instrumentation costs (such as monitoring wells). All other costs will be paid by WDNR and the Counties.

E. General Conditions

1. The Parties will each designate a representative to lead and coordinate implementation of this MOU, including communication, representation and participation.
2. WDNR will serve as a communication liaison to update the U.S. Environmental Protection Agency as to the status of the Clean Drinking Water Plan. Monthly reports will be generated by AGC and sent to WDNR for the first six (6) months of the program. The Parties will meet to evaluate further reporting at the end of the first six (6) months.
3. No Admission of Liability.
 - a. The Parties acknowledge that this executed MOU presents a reasonable and voluntary approach providing clean drinking water for residents of the agricultural corridor.
 - b. All Parties understand, acknowledge and agree that this MOU is voluntarily entered and is not to be construed as an admission of any liability, responsibility or wrongdoing whatsoever on the part of any party or its members, collectively or individually, any and all such liability is expressly denied and defenses expressly reserved.

4. Notice under this MOU shall be as follows:
 - a. AGC: [Insert Contact]
 - b. Juneau County: [Insert Contact]
 - c. Wood County: [Insert Contact]
 - d. WDNR: [Insert Contact]
5. This MOU is voluntary in nature and any party may withdraw from participation herein in the party's sole discretion and such withdrawal shall not affect the remaining parties' agreement to continue to perform hereunder or to terminate this MOU. The Parties further agree that this MOU may be amended in the future as necessary to implement the Clean Water Plan, but such amendment shall only be effective in a writing signed by all parties then participating and agreeing to be so bound.
6. This MOU is effective as of the date listed above, [Insert Date]. The MOU will terminate on December 31, 2022 or after the groundwater study identified par. D.1. of this MOU is completed, whichever comes first.
7. The Parties agree to meet monthly for the first six months following the effective date of this MOU to assess the implementation actions that have been completed and the actions that remain to be performed. The Parties will continue to meet on a routine basis after the first six-month period, but no less frequently than once every three months while this MOU is in effect. Approximately six months prior to the expiration of the MOU, the Parties agree to reconsider whether the MOU should be continued or whether a revised MOU is needed.
8. By signing below, each signatory represents and warrants that he or she has the authority to enter into this MOU and to so bind the respective party. This may be executed in counterparts and as so executed shall constitute one agreement binding on the Parties. Delivery of an executed counterpart of this MOU by email or other electronic means will be equally as effective as delivery of a manually executed counterpart of this MOU.

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS THEREOF and intending to be legally bound, the Parties have caused this MOU to be executed by signature of their duly authorized respective representatives as of the Effective Date.

JUNEAU COUNTY, WISCONSIN

By: _____

WOOD COUNTY, WISCONSIN

BY: _____

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

By: _____

ARMENIA GROWERS COALITION, LLC

By: _____